Commonwealth of Kentucky
Division for Air Quality

REVISED PERMIT APPLICATION SUMMARY FORM

Completed by: Lisa Beckham

GENERAL INFORMATION:

Name:	Griffin Industries, Inc.
Address:	4221 Alexandria Pike Cold Spring, KY
Date application received:	4-20-07
SIC Code/SIC description:	2077, Animal & Marine Fats & Oils
Source ID:	21-191-00007
Source A.I. #:	3408
Activity ID:	APE20060001
Permit:	V-03-022 Revision 1

APPLICATION TYPE/PERMIT ACTIVITY:

[ ] Initial issuance	[ ] General permit
[X] Permit modification	[ ] Conditional major
__Administrative	[X] Title V
__Minor	[X] Synthetic minor
_X Significant	[X] Operating
[ ] Permit renewal	[ ] Construction/operating

COMPLIANCE SUMMARY:

[ ] Source is out of compliance [ ] Compliance schedule included

[X] Compliance certification signed

APPLICABLE REQUIREMENTS LIST:

[ ] NSR	[X] NSPS	[X] SIP
[ ] PSD	[ ] NESHAPS	[ ] Other
[ ] Netted out of PSD/NSR	[ ] Not major modification per 401 KAR 51:001, 1(116)(b)	

MISCELLANEOUS:

[ ] Acid rain source

[ ] Source subject to 112(r)

[X] Source applied for federally enforceable emissions cap

[ ] Source provided terms for alternative operating scenarios

[ ] Source subject to a MACT standard

[ ] Source requested case-by-case 112(g) or (j) determination

[ ] Application proposes new control technology

[X] Certified by responsible official

[ ] Diagrams or drawings included

[ ] Confidential business information (CBI) submitted in application

[ ] Pollution Prevention Measures

[ ] Area is non-attainment (list pollutants):

EMISSIONS SUMMARY:

Pollutant	Actual* (tpy)	Potential (tpy)
PM/PM_{10}	18.14	116/87
SO_2	111	225**
NOx	64.6	151
CO	64.4	112
VOC	70	225**
Single HAPs (HCl)	--	9.0**
Source wide HAPs	--	22.5**

*Actual emissions based on 2005 Emissions Survey
**Potential emissions are based on source-wide emissions caps

SOURCE DESCRIPTION:

On December 11, 2006 Griffin Industries, Inc. (Griffin) submitted an application for a significant revision to their Butler facility's Title V/synthetic minor permit and additional information was submitted on February 5, 2007. The Butler facility operates a rendering plant as well as a bakery scrap operation in Pendleton County, Kentucky. In the rendering facility animal by-product materials are processed into tallow, grease, and high protein meat and bone meal. The bakery scrap operation dries scrap breads and dough to form cookie meal.

CURRENT PERMITTING ACTION: V-02-033 REVISION 1

This permit includes an emissions cap on hydrogen chloride, the addition of recycled cooking oil as a fuel source for two of the facility's boilers and the removal of the cooling tower as an emission unit to the insignificant activities list. Also Griffin submitted an economic analysis for the installation of a regenerative thermal oxidizer (RTO) unit to control VOC emissions from its bakery scrap process.

It was discovered while reviewing Griffin's Russellville facility that potential emissions of hydrogen chloride at the Butler facility exceed 10 tons per year. To prevent being a major source for a hazardous air pollutant and applicable to 40 CFR 63, Subpart DDDDD Griffin proposed a source-wide emissions cap on hydrogen chloride. This proposal in included in this permit.

When the cooling tower was installed in 1987 Griffin submitted information regarding the emission of ammonia from the cooling tower and was granted the usage based on dispersion modeling analysis by the Division and the state's rescinded toxics Regulation 401 KAR 63:022. The Division has revaluated recent submittal by the facility that ammonia is not emitted at the facility and concurs that the cooling tower should be classified as insignificant. The reason is that ammonia is not injected or processed at the facility, and is only present as a metabolic byproduct of the raw materials (which results in the trace quantities detected in the water from the cooling tower, which

can be stripped or emitted to the air)." With removal of the ammonia injection, 401 KAR 63:022 or 401 KAR 63:021, is no longer applicable to the facility, therefore emission Unit 05, Cooling Tower, has been moved to the facilities list of insignificant activities. The KYEIS system has been updated to reflect this change.

The use of recycled cooking oil as a fuel choice has been added to emission units 01 and 02. Potential emissions from the use of recycled cooking oil are generally lower than that of the other fuels listed for these units. Griffin previously had a source-wide emissions limit on VOC of 90 tons per year to preclude 401 KAR 50:012. Griffin has proposed to remove the 90 tons per year limit by showing that the installation of an RTO to control VOC emissions is not economically justifiable and therefore should not have to restrict emissions. It is difficult to determine Griffin's VOC potential to emit because the emissions from the bakery scrap process are not consistent due to variation in the product they receive for the process. The economic analysis submitted by Griffin was based on a potential of 113 tons per year from the bakery scarp process and this analysis showed that the installation of a regenerative thermal oxidizer (RTO) to reduce VOC emissions would not be economically justified. Because of the variation in the product Griffin receives, 113 tons per year does not likely represent their maximum potential, which is believed to be over 250 tons per year; however, if a source-wide potential of 250 tons per year is assumed in the RTO analysis (195 tons from the bakery scrap process) it is still not economically justified. Therefore, the source-wide emissions limit of 90 tons per year on VOC has been removed and replaced with a source-wide emissions limit of 225 tons per year.

EMISSIONS AND OPERATING CAPS DESCRIPTIONS:

- To preclude the applicability of 401 KAR 51:017, Prevention of significant deterioration, source-wide sulfur dioxide and volatile organic compounds emissions shall not exceed 225 tons per year based on a twelve (12) month rolling total.

- To preclude 40 CFR 63 Subpart DDDDD, NESHAPs for Institutional, Commercial, and Industrial Boilers and Process Heaters, after the applicability date of September 13, 2007, total source-wide Hydrogen Chloride (HCL) emissions shall not exceed 9.0 tons per year and combined HAPs shall not exceed 22.5 tons per year.

- To preclude the applicability of 401 KAR 51:017, source wide coal consumption shall not exceed 9,000 tons per year on a twelve-month rolling total and the sulfur content of the coal shall not exceed 1.0 percent by weight.

- To preclude the applicability of 401 KAR 51:017 and 40 CFR 63, Subpart DDDDD, #6 fuel oil consumption for emission unit 01 and 02 unit shall not exceed 537,500 gallons per year on a twelve-month rolling total. The sulfur content of each shipment of #6 fuel oil shall not exceed 0.5 percent by weight per ASTM standards. Additionally, "on spec" used oil usage for each unit shall not exceed 525,000 gallons per year on a twelve-month rolling total. The sulfur and ash content of "on spec" used oil shall not exceed 0.5 percent and 0.77 percent by weight per ASTM standards, respectively.

- To preclude the applicability of 40 CFR 63, Subpart DDDDD the halogen content of each shipment of "on spec" used oil shall not exceed 800 ppm of Total Halogens.

- Pursuant to 40 CFR 279, 40 CFR 761.20, and to preclude 40 CFR 63 Subpart DDDDD, On-Specification (On-Spec) Used Oil shall not exceed the allowable levels below:

ON-SPEC USED OIL SPECIFICATIONS	
Constituent/Property	***Allowable Level***
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Total halogens	800 ppm maximum
Flash Point	100 °F mimimum
PCBs	less than 2 ppm